

CLAIMS

1. A medicine storing and dispensing apparatus comprising a cap feeding section,

the cap feeding section including: a cap container
5 storing a plurality of caps for closing openings of medicine containers and having a slit formed at least one location of a bottom surface of the cap container;

a cap stirring member which has at least one stirring section formed in a rotating shaft in a state of protruding
10 inside the cap container through the slit and which stirs the caps by the stirring section through rotational driving; and

a cap path which continues to the cap container, has a clearance allowing only one cap to pass through, and which
15 is inclined downward so as to align the passing caps.

2. The medicine storing and dispensing apparatus according to Claim 1,

wherein the cap container has an inclined surface inclined toward the rotating shaft of the cap stirring member, the inclined surface having each slit formed thereon.
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3. The medicine storing and dispensing apparatus according to Claim 2,

wherein the cap stirring member is structured so that
25 the stirring section has a plurality of protruding sections

placed on an outer circumferential section of the rotating shaft for allowing stirring of the caps toward an upper side of the inclined surface through rotational driving.

4. The medicine storing and dispensing apparatus
5 according to any one of Claims 1 to 3,

wherein the cap stirring member is structured so that the stirring section has a plurality of protruding sections placed in a spiral manner on an outer circumferential section of the rotating shaft for allowing movement of the
10 caps from one end side to the other end side of the rotating shaft through rotational driving, and

wherein the cap pathway is placed on the other end side of the rotating shaft.

5. The medicine storing and dispensing apparatus
15 according to any one of Claim 1 to 4,

wherein the cap stirring member is placed in a plurality of locations.

6. The medicine storing and dispensing apparatus
according to any one of Claims 1 to 5,

20 wherein the cap pathway includes:

an inclined support section for supporting incoming caps by engaging with inner recess sections of the moving caps so as to further incline the inner recess sections in a case where the passing caps are positioned with the inner
25 recess sections being oriented downward;

a cap detecting section for detecting the caps supported in an inclined state by the inclined support section;

extruding means for moving the caps by canceling an
5 engaged state of the caps supported by the inclined support section based on a detection result by the cap detecting section; and

a cap direction changing section for changing a direction of the caps based on the detection result by the
10 cap detecting section so as to orient the inner recess sections in an identical direction.

7. The medicine storing and dispensing apparatus according to Claim 6,

wherein the cap pathway has a pair of chute rails
15 placed at an interval smaller than an inner diameter of the inner recess sections of the caps, and

wherein the inclined support section is formed by cutting away a part of the chute rails.

8. The medicine storing and dispensing apparatus
20 according to any one of Claims 1 to 7,

wherein the cap pathway is composed of a first cap pathway positioned on an upstream side of the cap direction changing section and a second cap pathway positioned on a downstream side of the cap direction changing section and
25 placed orthogonal to the first cap pathway,

wherein the cap direction changing section includes a guide pathway provided in a way of allowing rotational driving for storing the caps, which have moved through the first cap pathway, in an inclined state through a first opening on one end side and a guide plate for preventing the caps from dropping from a second opening on the other end side of the guide pathway, and

wherein when the cap direction changing section is rotated so as to orient the second opening of the guide pathway obliquely downward, the guide plate is operated to connect the second opening and the second cap pathway for allowing movement of the caps.